

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Office of Conservation and Coastal Lands
Honolulu, Hawaii

File No.: SSBN MA-06-02

December 8, 2006

State of Hawaii
Board of Land and
Natural Resources
Honolulu, Hawaii

REGARDING: Conservation District Use Application for Small-Scale Beach Nourishment (SSBN)

APPLICANT: 575 South Kihei Rd LLC

LANDOWNER: 575 South Kihei Rd LLC

LOCATION: Maui Lu, Kihei, Maui

TMK: Seaward of TMKs (2)3-9-001:083 &120

AREA OF USE: 2.7 acres of coastal lands for beach nourishment, 6540 Cubic Yards.

SUBZONE: Resource

BACKGROUND:

In October, 2000, the BLNR approved a master CDUA for the State Programmatic General Permit (SPGP) for small-scale beach nourishment (SSBN) (Exhibit 1). The board action includes a provision delegating to the Chairperson the authority to issue Category II permits for small-scale beach nourishment projects in Hawaii, subject to the Board's consent to delegate its authority at regular Board meetings.

The SPGP/SSBN is an attempt to make beach nourishment a more viable option to combat beach and coastal erosion. The SPGP/SSBN will streamline and simplify the permitting process for beach nourishment of up to 10,000 cubic yds of sand. The SPGP/SSBN incorporates all the requirements, special conditions, limitations required by all agency stakeholders.

The applicant is the subject of an easement request for the existing rock revetments and filled land. An easement request (PSF-05-MD-015) was heard and approved by the BLNR on February 25, 2005. As part of the easement request, the DLNR required the landowner to apply for beach nourishment to mitigate the adverse environmental and ecological effects of the encroachment. This application is in partial fulfillment of the request for consideration of the easement.

PURPOSE OF PROPOSED ACTION:

Nourishing the beaches near the Maui Lu with sand will have a positive impact to the beaches by helping stem the erosion in the area, and by adding sand to the beach system. At a natural beach slope of 1 vertical:12 horizontal (V:H), the quantity of sand fill proposed would result in an initial beach width increase of about 16 feet. This beach width will likely diminish as the sand fill is dispersed throughout the area. The design residence time of the project is not known. Detailed beach monitoring will be conducted for 1 year following the nourishment to help determine sand transport processes and residence time.

In evaluating a potential sand nourishment program for the Maui Lu area, careful consideration was given to where the sand would have the best possibility of being retained and determining the appropriate volumes for those areas (Exhibit 2). The selected sites were 1) between the Vancouver monument and Building A, 2) the pocket beach between Building A and B, and 3) the beach area between Building C and Kalepolepo fishpond. Areas 2 and 3 are bounded by hard protruding structures and may offer lateral stability to the emplaced sand. In addition, there is flank erosion occurring adjacent to the south end of the revetment protecting building C that would be mitigated by a nourishment project.

Three hotel buildings of the Maui Lu occupy the backshore of the northern half of the project site. Two pocket beaches are located between the revetments protecting the buildings and the Vancouver monument. The beaches are primarily used for sunbathing and recreational swimming. The southern half of the project site consists of a public county-owned beach park, with no amenities or improvements, known as Kalepolepo Beach. This beach is occasionally used for sunbathing, recreational swimming and some fishing. The shoreline in this area has suffered chronic erosion. The proposed nourishment is expected to have a beneficial impact on the shoreline in the vicinity. Nourishing the beaches near the Maui Lu with sand will have a positive impact on the recreational uses by expanding the beaches, by helping stem the erosion in the area, and by adding sand to the beach system.

It is the Department's understanding that extensive care has been taken in designing the project, choosing the location of the sand placement and quality in order to minimize user conflicts and environmental impacts, including impacts on water quality and local flora and fauna including coral reefs.

DESCRIPTION OF PROPOSED ACTION:

The beach nourishment project involves placement of 6540 cubic yards of sand along the two pocket beaches in front of the hotel, and along the beach to the south of the resort extending to Koieie Fishpond. The sand is to be placed landward of the Mean Lower Low Water (MLLW) line, at a slope of 1V:3H, up to a crest elevation of +4 to +8 feet Mean Sea Level (MSL), depending on the location. The nourished beach crest will extend landward to the intersection with existing grade. The sand fill elevation is generally designed to match the existing berm height of +6 feet in Areas 1 and 2. However, to mitigate the flank erosion in Area 3, more sand volume will be placed in this area. The sand fill elevation is planned to be + 8 feet in Area 3, and then transition to 4 feet at the mouth of Kulanihakoi Gulch (Areas 4 to 6). From Kulanihakoi Gulch south to Koieie Fishpond, the proposed fill elevation is +4 feet. The total cubic yardage required is approximately 6540 cubic yards. This includes approximately 1000 cy at Area 1, 720 cy at Area 2, and 4820 cy at Areas 3 to 6. The project and surrounding area has experienced steady, moderate erosion. The evidence for the need for nourishment is the presence of revetments to protect the Maui Lu buildings from erosion damage, and some flank erosion at the south end of the south revetment.

Studies completed by Sea Engineering (1991) and the U.H. Coastal Geology Group have shown chronic erosion of the entire Kihei shoreline between Koieie Fishpond and Maalaea Harbor. Historical aerial photographs of the project area show that between 1900 and 1960, prior to the construction of any shoreline structures, there was significant recession of the low water mark. In the project area, between 1949 and 1960, the low water mark receded 20 to 35 feet. From 1975 to 1997, following construction of the revetments, there has been continued erosion both to the south and north of the project site. The reasons for the erosion are not known, but may be related to the effects of Koieie Fishpond. The shoreline immediately to the south of Koieie Fishpond has accreted significantly, while the shoreline to the north has eroded. This suggests that the fishpond may be blocking sand transport to the north.

Sand is to be obtained from an approved commercially available source. The sand source will be determined later by the selected project contractor. Sand that meets the specifications of this permit application is commercially available from Ameron Hawaii – Maui Office. The sand is called "Screened Grade A Sand".

Scope of Work

- Beach nourishment areas to include the 180 foot-long beach between the Vancouver Monument and Building A (Area 1), 100-foot long pocket beach between Buildings B and C (Area 2), and 800-foot long beach between Building C and Koieie fishpond to the south (Area 3).
- Sand fill will be placed landward of the 0-elevation, at a slope of 1V:3H, up to the +6 ft elevation and extend landward of the existing berm crest.
- Total sand volume will be 6,500 cubic yards (cy): approximately 1100 cy at Site 1 660 cy at Site 2 and 4800 cy at Site 3.
- The sand fill will initially extend the beach approximately 54 feet seaward at the +6 foot elevation. At the natural beach slope of 1V:12H, the sand fill will result in a beach width increase of 16 feet, after redistribution of the sand by wave action.
- Sand fill is to be placed landward of the 0-elevation to minimize impacts to water quality and the marine environment.
- Dune enhancement will also be conducted in the backshore area of the beach between the Vancouver monument and Building A
- A detailed monitoring program will be conducted for a period of 1 year following the beach nourishment. An after action report will be completed after the 1-year monitoring program.

In accordance with the SPGP/SSBN the following activities are considered for approval:

1. The placement of up to 6,540 cubic yards of sand for the purposes of restoring and nourishing the beach fronting the subject property in Kihei, Maui.
2. Construction and installation of appropriate and effective silt containment devices, including settling and retention basins and silt curtains.
3. Initiation and mobilization of applicable mechanical equipment, including the use of heavy equipment on the beach to mobilize and shape the imported sand to the designed beach profile.

Categories of Activities

This project falls within the scope of a Category II project. Category II projects involve the placement of more than 500 and up to 10,000 cubic yards of sand within the shoreline area and/or involve pumping offshore sand to the beach.

Panel of Technical Experts

A special Panel of Technical Experts (PTE) was formed to review Category II applications in order to ensure consistency with the provisions of the SPGP and to maintain a high level of environmental safeguards. This independent panel consists of:

1. **Dr. Charles Fletcher, Coastal Geologist.** University of Hawaii, School of Ocean and Earth Science and Technology Department of Geology and Geophysics
2. **Dr. Mark Merrifield, Oceanographer.** University of Hawai'i, School of Ocean and Earth Science and Technology Department of Oceanography
3. **Tom Smith, Coastal Engineer.** U.S. Army Corps of Engineers, Pacific Ocean Division
4. **Mr. Alan Everson, Marine Biologist.** NOAA National Marine Fisheries, Pacific Islands Region

The panel has reviewed the project application and provided comments to the OCCL with appropriate recommendations for the project design and technical specifications. These recommendations adequately addressed or adopted by the applicant and will be reflected in the final terms and conditions of the authorization.

SUMMARY:

Following review is provided in summary of the application:

1. The beach nourishment project is applied for as required by an agreement for resolution of encroachment case MA-04-02A involving a rock revetment and filled land at the subject property. The encroachment case was heard and approved for lease by the BLNR on February 25, 2005.
2. A Public Notice was issued in the Office of Environmental Quality Control (OEQC) *Environmental Notice* on September 8, 2006. To date, no comments have been received from the general public regarding the proposed project.

3. In conformance with Title 11, Chapter 200(8), of the Administrative Rules, a Draft Environmental Assessment (DEA) was published in the Environmental Notice for the blanket CDUA (ST-3000) on March 8, 2000. The Department of Land and Natural Resources, Land Division issued a Finding of no Significant Impact to the Environment (FONSI) on May 18, 2000. The FONSI was published in the June 8, 2000 OEQC *Environmental Notice*.
4. Although not required by the SSBN, the applicant's consultant (Sea Engineering) has completed an Environmental Assessment for the project including a coastal engineering assessment of the proposed project.
5. A request for comments for the subject SSBN application was sent to the following agencies and persons: Department of Health- Clean Water Branch, Army Corps of Engineers, National Marine Fisheries Service, Office of Hawaiian Affairs (OHA), Maui Co Planning Dept, Hawaii State Historic Preservation Division, Hawaii Coastal Zone Management Program, NOAA (PIRO), U.S. Fish and Wildlife Service, Beach Nourishment Panel of Technical Experts. Comments received were adequately addressed or adopted by the applicant and will be reflected in the final terms and conditions.
6. Chapter 205A, HRS encompasses most land, water and marine areas of the State. Section 205A-2(a)(9)(C) states that it is a policy of CZM, to "minimize" the construction of public erosion-protection structures seaward of the shoreline. In this case, the erosion control structure could be considered to be a beach or a small structure to retain sand. These are more commonly referred to as soft structures. Sand nourishment is the "softest" structure that can be used as shoreline protection.

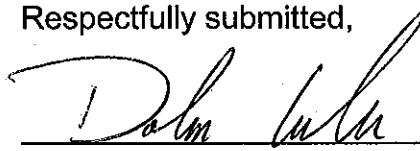
CONCLUSION:

Staff has determined that this project is consistent with the purpose of the Conservation District and consistent with the goals and objectives of the Hawaii Coastal Erosion Management Plan (COEMAP) adopted by the Board of Land and Natural Resources in 1999. It is a major goal of COEMAP to promote appropriate erosion control and beach nourishment efforts such as this.

RECOMMENDATION:

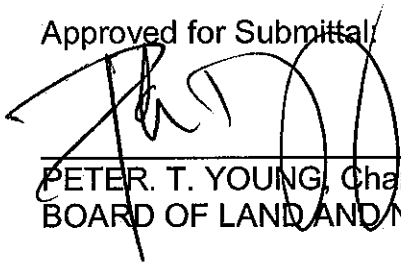
That the Board of Land and Natural Resources consent to allow the Chairperson to review and authorize the proposed beach nourishment permit MA-06-02 pursuant to CDUA (ST-3000).

Respectfully submitted,



Dolan Eversole, Coastal Geologist
Office of Conservation and Coastal Lands

Approved for Submittal



PETER. T. YOUNG, Chairperson
BOARD OF LAND AND NATURAL RESOURCES

Exhibits: 1. CDUA St-3000 Board Approval Letter.
Exhibits: 2. Location Map.

**Exhibit 1.
October, 2000 Board CDUA Approval**



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

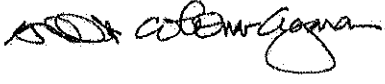
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AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND DIVISION
STATE PARKS
WATER RESOURCE MANAGEMENT

APR 2 2002

MEMORANDUM

TO: Harry Yada, Acting Administrator
Land Division

FROM: Gilbert Coloma-Agaran, Chairperson 
Board of Land and Natural Resources

SUBJECT: Board Approval of Conservation District Use Application ST-3000 for
Small Scale Beach Nourishment Projects in Hawaii

This is to inform you that at its November 27, 2000 meeting, the Board of Land and Natural Resources approved the statewide application to permit small-scale beach nourishment projects in the State of Hawaii, and also delegated to the Chairperson the authority to issue Category II permits for small-scale beach nourishment projects in Hawaii, subject to the Board's consent to delegate its authority at regular Board meetings, and subject to the following conditions:

1. The Board of Land and Natural Resources hereby delegates to the Chairperson the authority to issue Category I permits for small-scale beach nourishment projects in Hawaii, without board consent to delegate;
2. Category II actions shall be published in the Environmental Notice;
3. No activity will be authorized under this permit which is likely to adversely affect a Federally listed threatened or endangered species or a species proposed for such designation, or destroy or adversely modify its designated critical habitat;
4. No activity authorized by this permit may substantially disrupt the movement of those species of aquatic life indigenous to the area, including those species, which normally migrate through the area;

6. No activity will be authorized under this SPGP in properties listed or eligible for listing in the National Register of Historic Places without the written consent of the State Historic Preservation Officer;
7. When the Chairperson is notified by the applicant or the public that an individual activity deviates from the scope of an application approved under this permit, or activities are adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the permittee(s) to undertake corrective measures to address the condition affecting these resources. The permittee(s) must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
8. When the Chairperson is notified by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service or the State Department of Land and Natural Resources that an individual activity or activities authorized under this permit is adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the permittee(s) to undertake corrective measures to address the condition affecting these resources. The permittee(s) must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
9. Applicants must submit written compliance reports to the CLP and CWB, including a final report within two months of completion of a project authorized under this permit. The compliance reports must include, as appropriate, descriptions of the construction activities, discussion(s) of any deviations from the proposed project design and the cause of these deviations, results of environmental monitoring, discussion(s) of any necessary corrective action(s), and photographs documenting the progress of the permitted work;
10. On a case-by-case basis the Corps may impose special conditions on projects authorized under this permit, which are deemed necessary to minimize adverse environmental impacts;
11. The DLNR in conjunction with the Federal resource agencies will conduct periodic reviews to determine that the continuation of this permit is not contrary to the public interest;
12. The length of time required to process each request under this permit will be directly related to the adequacy and completeness of the information submitted by the applicant;
13. Abutting landowners shall not be permitted to claim areas artificially nourished with sand under the State's accretion laws for projects authorized under this permit;
14. Any work or construction authorized under this permit shall be initiated within six (6) months of the approval of such use, and, unless otherwise authorized, shall be completed within one (1) year of the approval of such use. The applicant shall notify the department in writing when construction activity is initiated and when it is completed;

15. To avoid encroachments upon the areas nourished with sand, affected property owners realize that the State may claim that the added sand under existing laws may prevent them from moving the certified shoreline seaward of the present vegetation line until there is substantive evidence that the sand has moved on to other areas. During sand placement, care shall be taken to protect existing dune vegetation and any other existing vegetation along the shoreline. To facilitate any later applications for shoreline certifications, the affected property owners are encouraged to document their present shorelines with photographs or surveys;
16. Where any interference, nuisance, or harm may be caused, or hazard established by the activities authorized under this permit, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm or hazard;
17. For projects authorized under this permit, the applicant shall take measures to ensure that the public is adequately informed of the project work once it is initiated and the need to avoid the project area during the nourishment operation, and for several days following the completion of the nourishment operation to allow potential bacteria levels to decrease;
18. No contamination of the marine environment (trash or debris disposal) shall result from project-related activities authorized under this permit;
19. In the event there is any petroleum spill on the sand, the operator shall promptly remove the contaminated sand from the beach;
20. For projects authorized under this permit, the applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under projects authorized under this permit;
21. The Department of Land and Natural Resources reserves the right to impose additional terms and conditions on projects authorized under this permit, if it deems them necessary;
22. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments for projects authorized under this permit;
23. The applicant shall implement standard Best Management Practices (BMPs), including the ability to contain and clean-up fuel; fluid or oil spills immediately for projects authorized under this permit. Equipment must not be refueled in the shoreline area;
24. All conditions imposed under the U.S. Army Corps of Engineers State Program General Permit for this effort are hereby incorporated into this statewide Conservation District Use Application;

25. If retention structures are used for projects authorized under this permit, they shall be removed within 30 days of written notification of the Department of Land and Natural Resources, at the applicant's own cost, if the structures do not improve the situation (slow or reverse erosion) or if the structures cause unanticipated impacts in the area;
26. In the unlikely event that historic sites, including human burials are uncovered during routine construction activities for projects authorized under this permit, all work in the vicinity must stop and the State Historic Preservation Division must be contacted at 692-8015;
27. Coastal Lands Program staff will develop a new application form to facilitate the application process for projects authorized under this permit;
28. Coastal Lands Program staff will provide a list of projects approved by the Chairperson to the Board on an annual basis;
29. All Special Conditions imposed by the Honolulu District Engineer on the State Program General Permit are hereby incorporated into projects authorized under this permit;
30. The application process shall include a requirement that the applicant notify all abutting property owners and community organization that may be affected by the proposed action. In addition, each of the property owners and community organizations shall be notified of the time, date, and place that the Board will review the proposed application;
31. The processing fee for Category II permits shall be \$250.00;
32. Other terms and conditions as prescribed by the Chairperson; and
33. Failure on the part of applicants to comply with any conditions imposed on projects authorized under this permit shall render the permit null and void.

cc: Board Members Land Agents
DAR/BD/DOCARE
County Planning Departments
OHA/DOHIU.S.
Fish and Wildlife Service/NMFS/Corps

Exhibit 2. Location Map

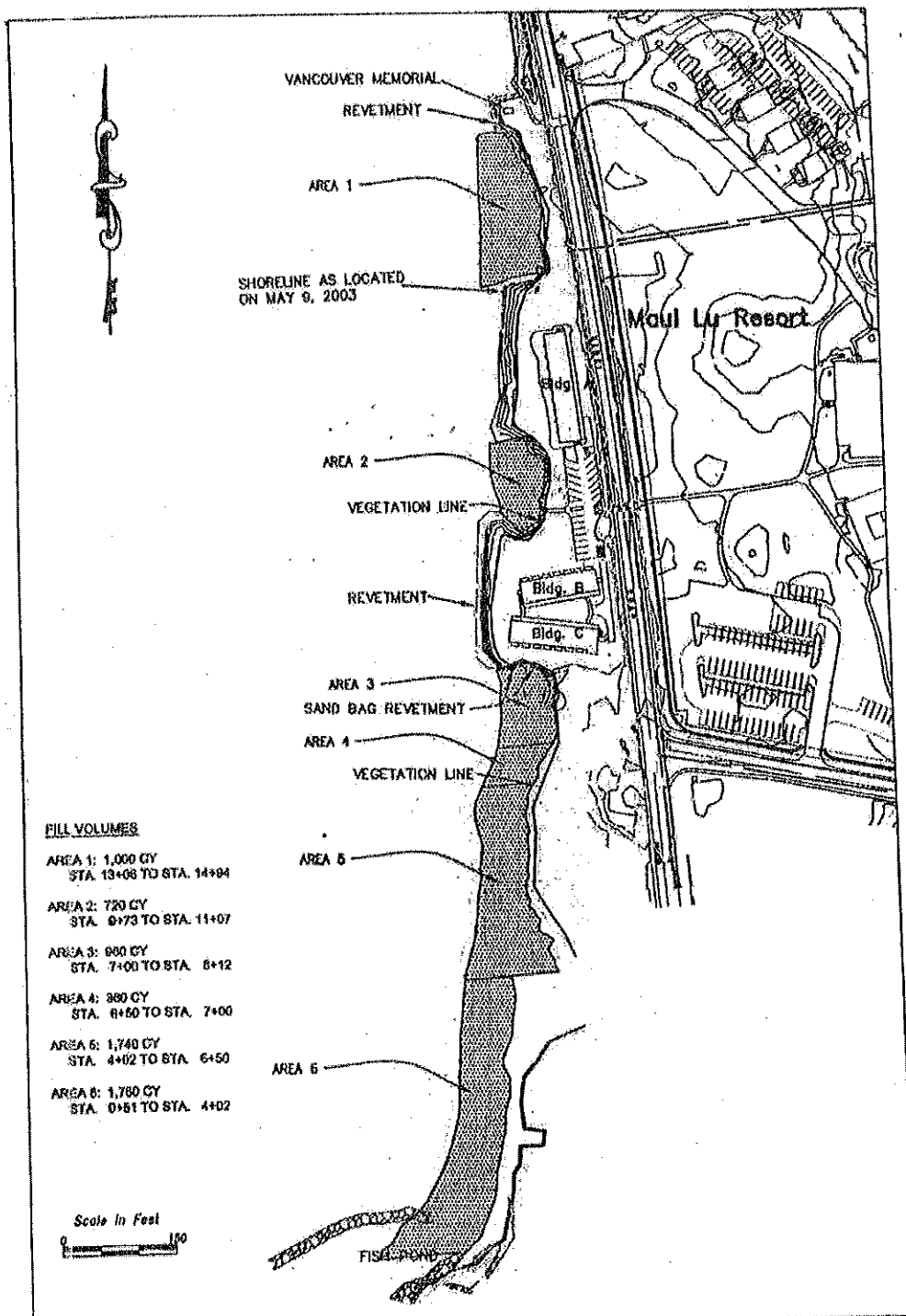


Figure 16. Beach nourishment plan view.